

Cherokee County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Cherokee County economy.¹

These 19 sectors have a total direct output of approximately **\$226.8 million** and support **827 jobs** in Cherokee County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Cherokee County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	826.9	9.43%	\$56,949,139	8.82%	\$226,822,406	35.13%
Indirect Effect	201.6	2.30%	\$15,017,380	2.33%	\$32,479,375	5.03%
Induced Effect	111.6	1.27%	\$8,261,027	1.28%	\$14,974,243	2.32%
Total Effect	1140.1	13.00%	\$80,227,546	12.42%	\$274,276,023	42.48%

As shown in the above table, agriculture, food, and food processing sectors support **1,140 jobs**, or **13.00%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$274.3 million**, roughly **42.48% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately **\$80.2 million**, or **12.42% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **12.42% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **304 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Cherokee County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	304.0	\$33,771,009
Animal production, except cattle and poultry and eggs	152.1	\$17,939,034
Grain farming	90.1	\$31,342,394
All other crop farming	67.2	\$4,829,136
Oilseed farming	40.6	\$39,811,246
Wholesale trade	40.3	\$8,095,990
Other animal food manufacturing	35.7	\$47,136,761
Support activities for agriculture and forestry	32.0	\$1,822,922
Tree nut farming	30.4	\$4,857,771
Landscape and horticultural services	28.3	\$995,706

The other animal food manufacturing sector directly contributes approximately **\$47.1 million** to the Cherokee County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Other animal food manufacturing	35.7	\$47,136,761
Oilseed farming	40.6	\$39,811,246
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	304.0	\$33,771,009
Grain farming	90.1	\$31,342,394
Dog and cat food manufacturing	20.0	\$28,034,272
Animal production, except cattle and poultry and eggs	152.1	\$17,939,034
Food product machinery manufacturing	28.1	\$8,556,200
Wholesale trade	40.3	\$8,095,990
Poultry and egg production	9.1	\$7,077,484
Tree nut farming	30.4	\$4,857,771

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Cherokee County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	40.6	\$39,811,245.63
Grain farming	90.1	\$31,342,394.40
Vegetable and melon farming	1.5	\$294,589.94
Fruit farming	0.1	\$9,708.72
Tree nut farming	30.4	\$4,857,771.48
All other crop farming	67.2	\$4,829,136.45
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	304.0	\$33,771,009.10
Poultry and egg production	9.1	\$7,077,484.46
Animal production, except cattle and poultry and eggs	152.1	\$17,939,034.34
Commercial logging	1.5	\$67,636.60
Commercial hunting and trapping	3.1	\$61,978.22
Dog and cat food manufacturing	20.0	\$28,034,271.61
Other animal food manufacturing	35.7	\$47,136,761.34
Animal, except poultry, slaughtering	1.0	\$643,008.84
Bread and bakery product, except frozen, manufacturing	6.5	\$733,759.16
Frozen cakes and other pastries manufacturing	0.3	\$49,311.54
Food product machinery manufacturing	28.1	\$8,556,200.09
Veterinary services	7.4	\$611,397.36
Landscape and horticultural services	28.3	\$995,706.47

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Cherokee County, the retail sector was omitted.